To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS

From: Dianna L. Taylor

Bureau Chief of Personnel Management

Subject: Technical Vacancy

Date: August 9, 2017

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement August 10, 2017 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m.** on **Wednesday**, **August 23**, **2017**. Applications will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License and ACTIVE Illinois Structural Engineer license must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE VII Structural Services Section Chief

Bureau of Bridges & Structures Office of Program Development

Springfield

Attachments 42189

Technical Applications PM1080 rev 6/1/17\*\*must be received by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by Wednesday, August 23, 2017, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License and ACTIVE Illinois Structural Engineer license must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



**Position Summary Sheet** 

An Equal Opportunity Employer

Classification: Civil Engineer VII Salary: \$7,640 - \$9,650\*

Position Title: Structural Services Section Chief Union Position: X Yes No

Position Number: PW117-23-65-906-00-01 IPR#: 42189

## Office/Central Bureau/District/Work Address:

Office of Program Development / Bureau of Bridges and Structures / 2300 South Dirksen Parkway, Springfield, IL

# **Description Of Duties:**

This position is accountable for managing and directing diverse and highly technical structural engineering activities; and developing departmental policies and procedures relating to the structural investigations of existing bridges; development or review of repair plans; determination of bridge load-carrying capacity; establishment of posted bridge weight limits; evaluation of overweight permit vehicle movements; review of proposed legislation; maintenance of bridge plan archives and data; review and approval of Local Agency bridge projects; and implementation and operation of a Bridge Management System (BMS). This position also provides oversight of the bridge inspection procedures utilized by the department and local agencies to ensure bridge safety and compliance with the National Bridge Inspection Standards (NBIS).

# Special Qualifications:

### Required:

- Current Illinois Professional Engineer license
- Current Illinois Structural Engineer license
- Valid driver's license
- Occasional statewide travel which may require overnight stays

# Desired:

- Ten years of experience in civil engineering with emphasis in bridge design and planning
- Seven years of managerial experience leading technical staff in the design and planning of traffic structures
- Ability to develop and maintain cooperative relationships with departmental staff
- Strong oral and written communication skills

### Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

\*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

\*\*Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

# ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE: May 1, 2017 POSITION: Structural Services Section Chief

APPROVED BY: Carl Puzey OFFICE/DIVISION: Office of Program Development /

Bureau of Bridges and Structures

CODE: PW117 23-65-906-00-01 REPORTS TO: Bureau Chief of Bridges and

Structures

### **Position Purpose**

This position is accountable for managing and directing diverse and highly technical structural engineering activities and for developing Departmental policies and procedures relating to the structural investigations of existing bridges, development or review of repair plans, determination of bridge load-carrying capacity, establishment of posted bridge weight limits, evaluation of overweight permit vehicle movements, review of proposed legislation, maintenance of bridge plan archives and data, review and approval of Local Agency bridge projects and implementation and operation of a Bridge Management System (BMS). This position provides oversight of the bridge inspection procedures utilized by the department and local agencies to ensure bridge safety and for compliance with the National Bridge Inspection Standards (NBIS).

#### **Dimensions**

Subordinate Personnel: 4 Direct/ up to 40 Indirect

Annual Payroll: \$12.5 M Annual Bridges Program: \$130 M

Annual Projects Managed: 15-200 repair plans produced or reviewed, 300 local agency bridge

projects reviewed, 300 bridge safe load-carrying capacities

determined, 900-1000 overweight vehicle permits evaluated

### Nature and Scope

This position reports to the Bureau Chief of Bridges and Structures: as do the Bridge Design Section Chief, Bridge Planning Section Chief, the Services Development Section Chief and an Executive Secretary. Reporting to this position are the Unit Chiefs of Local Bridge, Bridge Investigations and Repair Plans, Bridge Ratings and Permit, and Bridge Management and Inspection.

This position operates in an environment of establishing policies and procedures to ensure safety inspections are routinely and properly conducted for bridges in accordance with Federal Regulations and department policies; ensuring inspections are conducted to determine the safe bridge load-carrying capacity of all structures carrying public roadways; reviewing local agency bridge projects to ensure proper development; and, verifying repair and maintenance projects for state bridges are effective in addressing structural deficiencies. The incumbent directs, manages, and coordinates section activities including investigating and evaluating damaged or deteriorated bridge members; implementing structural repair plans, reviewing preliminary bridge design and hydraulic reports for local agency bridge projects, performing field inspections and analysis to determine safe bridge load-carrying capacities, determining bridge weight limits for deficient bridges, evaluating the effect of proposed legislation on statewide bridge infrastructure, and training and uniformity in statewide reporting of bridge safety inspections. The incumbent develops and administers policy to carry out the above responsibilities in part through maintenance of the Structural Services Manual. S/He oversees development, implementation and administration of a Bridge Management System (BMS) for the purposes of optimizing asset management and meeting asset management requirements. S/He ensures integrity of the Department's bridge inventory data in the Illinois Structure Information System (ISIS).

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Typical problems include the necessity to administer an extremely complex program, managed by a staff of highly trained engineers and technicians, that will ensure all construction, design, and maintenance concept applications are in accordance with AASHTO Specifications and established state and federal policies and structural codes. The greatest challenge for this position lies in directing the development of Departmental policies and procedures for bridge maintenance, structural ratings, investigations, repair plans, inspections, and the posting of weight limits for deficient bridges.

The incumbent is personally responsible for management of all section activity; and the final approval of structural plans, policies and procedures for maintenance, repair and inspection of state maintained bridges; and the direction and development of measures to ensure bridge safety inspections are properly conducted for state and local agency bridges. Other personal responsibilities include the evaluation of requests for overweight vehicle permits and for the movement of heavy construction equipment, and the approval of preliminary and final design documents and plans for Local Agency projects. The incumbent assigns projects to subordinates commensurate with their engineering expertise and monitors their progress, authorizes training of subordinates in the performance of their duties, directs development and maintenance of the Structural Services Manual, determines operational policies, defines work responsibility, and formulates the section's operating budget.

The incumbent accomplishes accountabilities through the following staff:

<u>Local Bridge Unit Chief</u>, who provides administrative and technical expertise to local agencies in solving problems related to the development of local agency bridge projects, repairs to address bridge deterioration, investigations to determine safe bridge load-carrying capacities, and establishing acceptable bridge weight limits for use in posting deficient local agency structures.

<u>Bridge Investigations and Repair Plans Unit Chief</u>, who is responsible for investigations to determine remedies to address structural deficiencies affecting the safety of bridges under state jurisdiction, the preparation and review of all repair and rehabilitation plans prepared to address structural deficiencies, and the maintenance of the bridge plan archive for structures maintained by the Department.

<u>Bridge Ratings and Permit Unit Chief</u>, who is responsible for ensuring that safe load-carrying capacities are determined for all structures under state jurisdiction, establishing acceptable bridge weight limits for use in posting deficient state structures, and the evaluation of applications for overweight vehicle permits to ensure damage affecting safe bridge load-carrying capacity will not occur due to the passage of those vehicles.

Bridge Management and Inspection Unit Chief, who is responsible for development and implementation of a bridge management system for asset management purposes, development and implementation of inspection policy to meet requirements of the National Bridge Inspection Standards (NBIS) through maintenance of appropriate portions of the Structural Services Manual, tracking of timeliness of all inspection types required by policy and to meet NBIS and NBIS 23 metrics requirements including routine, fracture critical, underwater, complex, in-depth and special inspections. This includes management of the functions and duties of a Statewide Bridge Inspection Crew and the equipment responsible for all necessary types of inspections of major bridge structures throughout the state for safety inspection, report preparation, compliance with the NBIS, and for gathering any information needed for other purposes including but not limited to scoping and programming. S/He develops and oversees inspector training, Quality Control (QC) and Quality Assurance (QA) of the bridge inspection program in Illinois and maintenance of bridge inventory data integrity in the ISIS.

The incumbent has broad responsibility for resolving both technical and managerial problems involving his/her area of responsibility. S/He is considered a Department authority in the area of bridge inspection, repair, inventory, maintenance, and other structural services and is constrained by state, federal and AASHTO rules,

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regulations, policies, and procedures. Only critical problems are referred to the Bureau Chief for discussion or resolution.

Internal contacts include the regions, districts, central bureaus of Local Roads and Streets, Construction, Design and Environment, Materials, Operations, Information Processing, the Office of Planning and Programming, as well as other units and sections within the bureau. External contacts include Federal Highway Administration, state universities, AASHTO officials, counties, municipalities, local agency associations, suppliers, and manufacturers of materials used in structures, outside consultants, national structural engineers, state officials and legislators. Occasional statewide travel is required of this positon.

The effectiveness of this position is measured by the incumbent's ability to direct the timely maintenance of bridges and structures throughout the state; the development and implementation of sound structural policies and procedures; and on his/her ability to provide guidance and direction in the resolution of extremely complex, state-of-the-art structural problems.

## Principal Accountabilities

- 1 Provides direction and oversight for all activities related to the performance of inspections to ensure bridge safety and for compliance with the NBIS.
- 2. Directs structural investigation, analysis, and the preparation of repair plans for bridges and structures maintained by the Department.
- 3. Develops Departmental policies and procedures relating to bridge repair determinations, bridge load-carrying capacity ratings, overweight vehicle permit evaluations, repair plan preparation, bridge maintenance activities, bridge safety inspections, bridge plan archive maintenance, and local agency bridge project review. This in part is accomplished through maintenance of the Structural Services Manual.
- 4. Directs the analysis and determination of safe load carrying capacities for both Department maintained and local agency bridges.
- 5. Approves corrective actions, development of repair plans, and maintenance activities intended to address problems involving bridges and structures.
- 6. Administers activities to ensure local agency bridge projects are properly developed, and the effects of proposed changes to the Illinois Vehicle Code on bridge infrastructure are evaluated.
- 7. Assigns, motivates, evaluates and develops subordinates to maintain a high level of employee morale and work performance.
- 8. Provides guidance and direction in the resolution of complex structural problems.
- 9. Develops, implements and administers a Bridge Management System (BMS) and maintains bridge inventory data integrity in the ISIS.
- 10. Manages consultants directed to perform any or all functions listed above.
- 11. Performs duties in compliance with Departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 12. Performs other duties as assigned.